



# Public Hearing Presentation

Permit Writer: [enter name here]

Hearing Examiner: [enter name here]

# Overview

- **Role of the Public**
- **Air Pollution Control Permits**
- **Permit Processing Procedure**
- **Air Quality Analysis**
- **Risk Assessment**
- **Air Pollution, Levels and Emissions**
- **Conclusions**

# Role of the Public

- How can you get involved?

- Be informed

- Review permit documents



- Contact the permit writer



- Ask questions



- Submit comments



# Role of the Public

- **Knowledge of Law:**
  - Department is required, by law, to issue air pollution control permits to facilities that meet the requirements and limitations and to deny permits to facilities that do not meet requirements and limitations
  - A final decision is not made by a vote, regardless of support for or concern with a facility

# Universe of Public Issues and Concerns

- Noise
- Traffic
- Lighting
- Jobs
- Hours of Operation
- Handling of flammable materials
- Aesthetics

## Those that can be addressed by DNR Air Management

- Permit conditions
- Permit language
- Interpretation of regulations
- Air quality impacts

**Some of these may be controlled elsewhere, such as through local ordinances.**

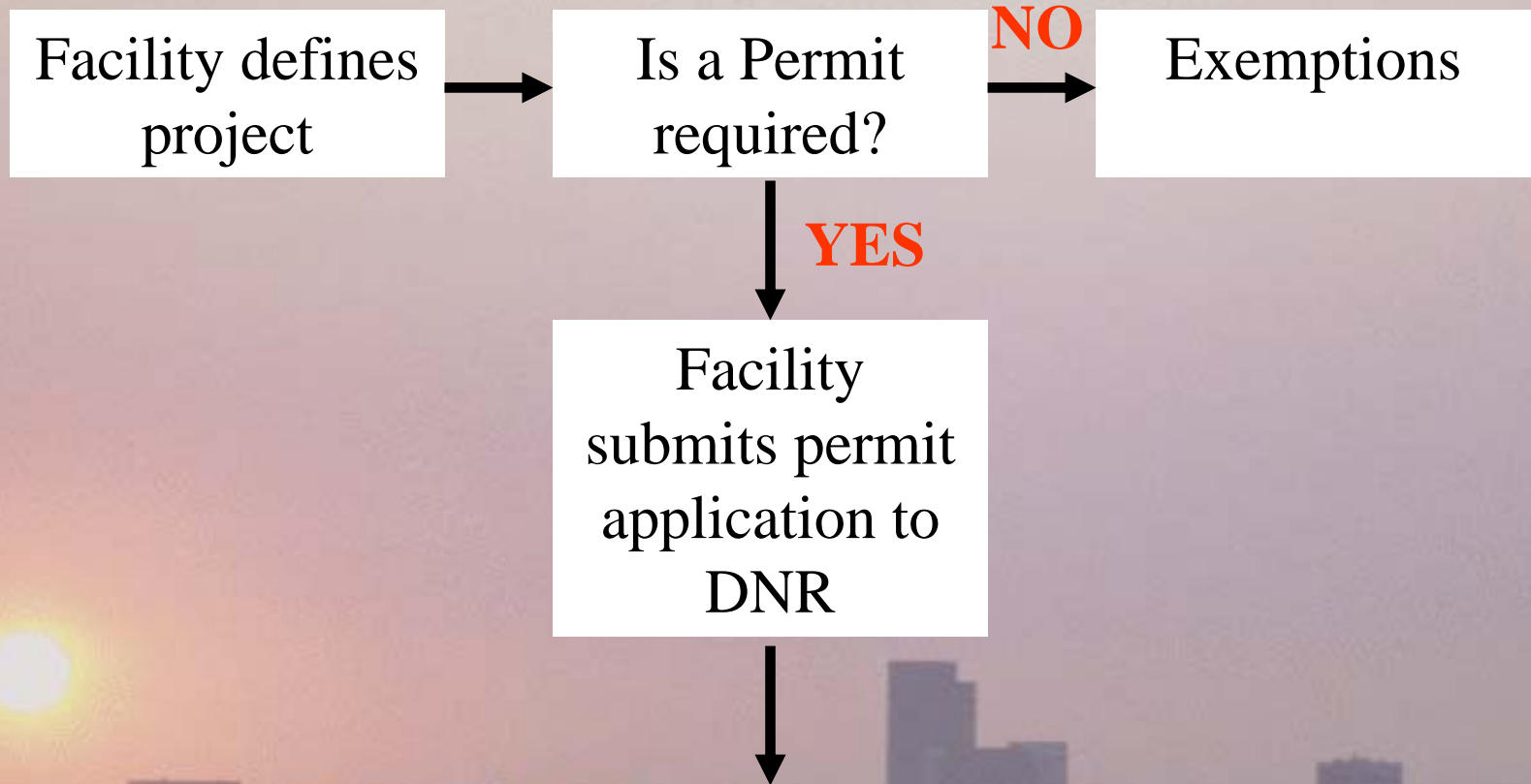
# **Air Pollution Control Permits**

- **What do Air Permits do?**
  - **Identify applicable legal requirements**
  - **Delineate how the facility will comply with those requirements**
  - **Give authority to facility to emit at regulated levels**
  - **Assure air quality standards can be met**
    - **Protect human health and welfare**

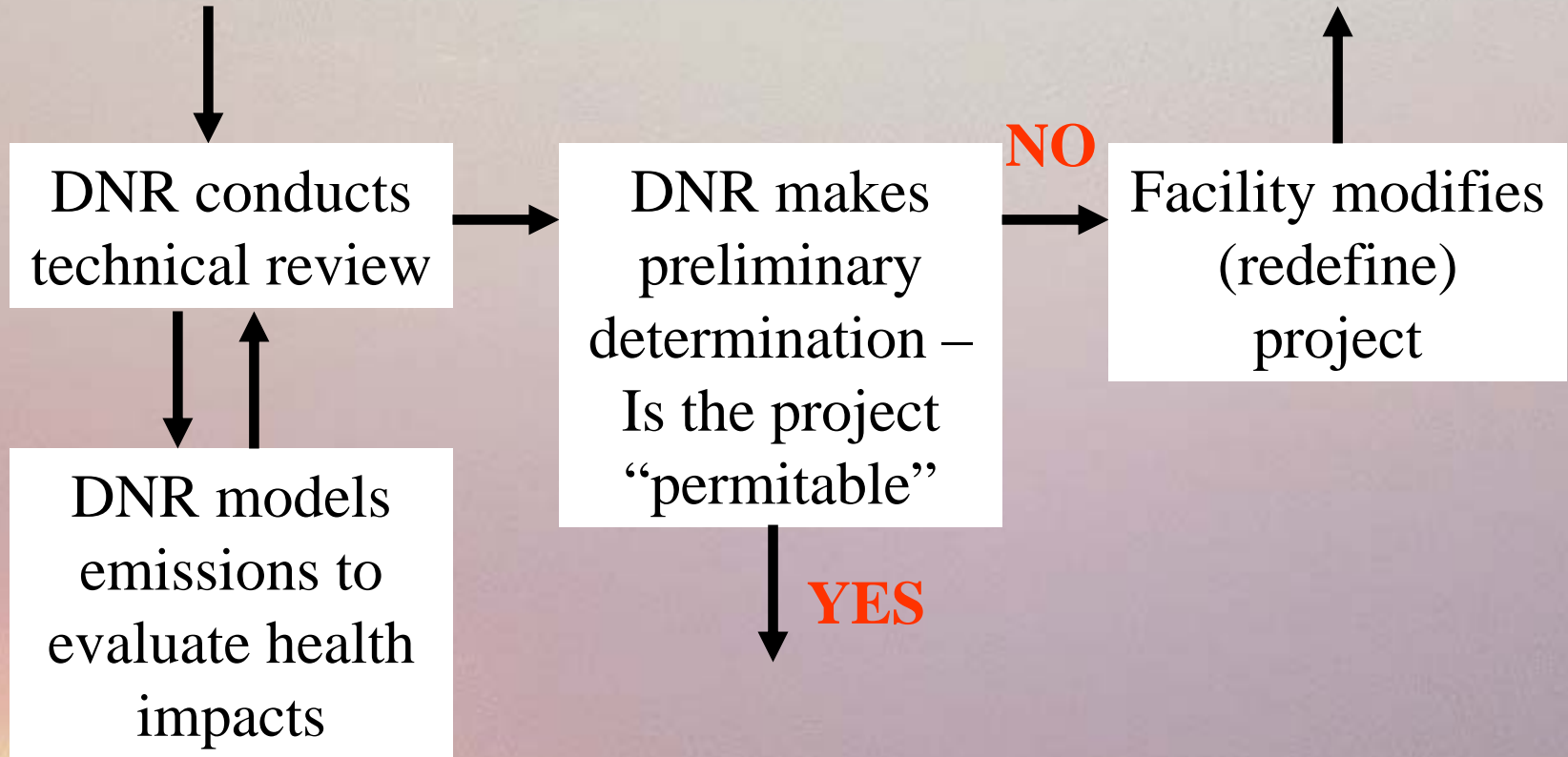


# Permit Processing Procedure

[Refer to Handout]

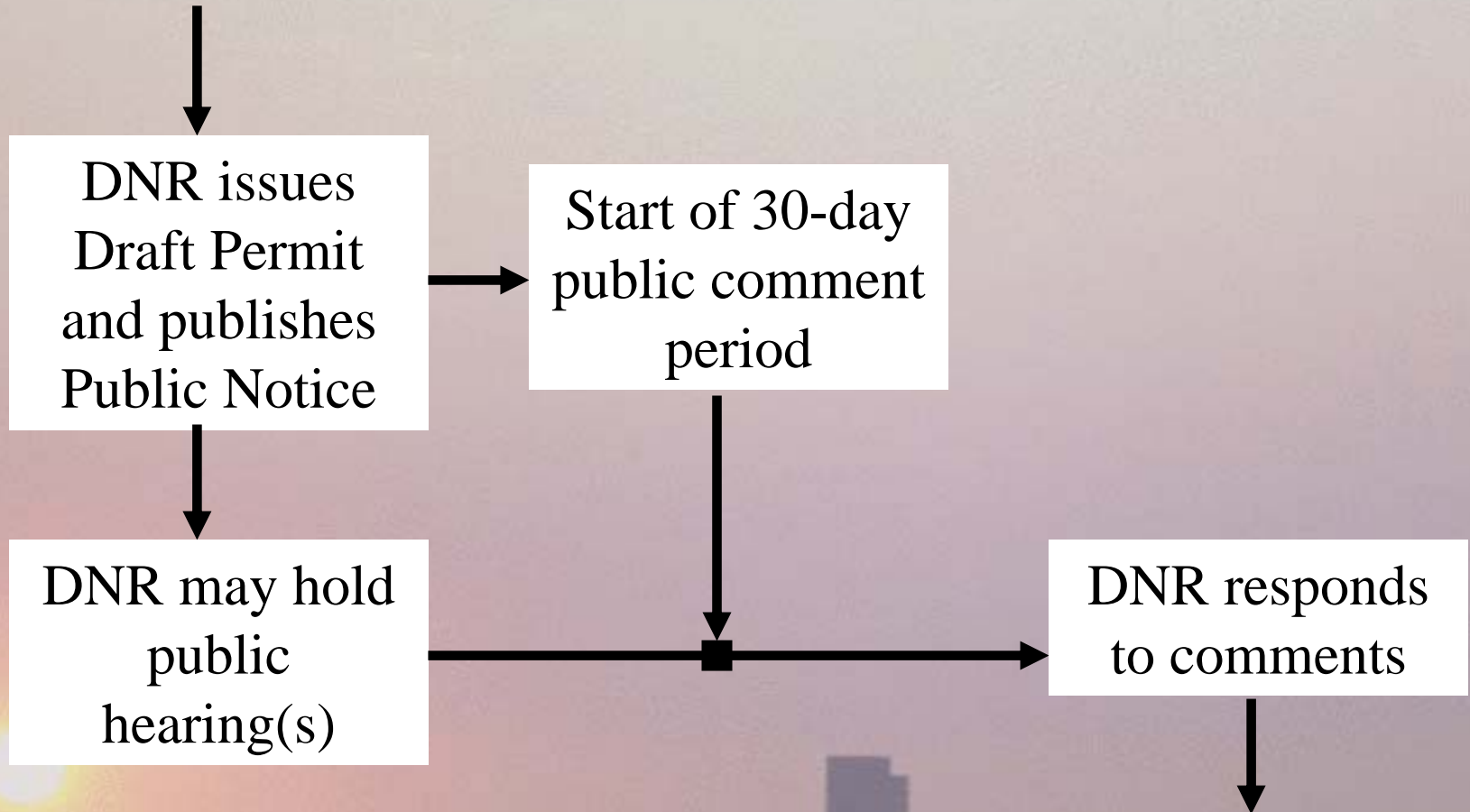


# Permit Processing Procedure

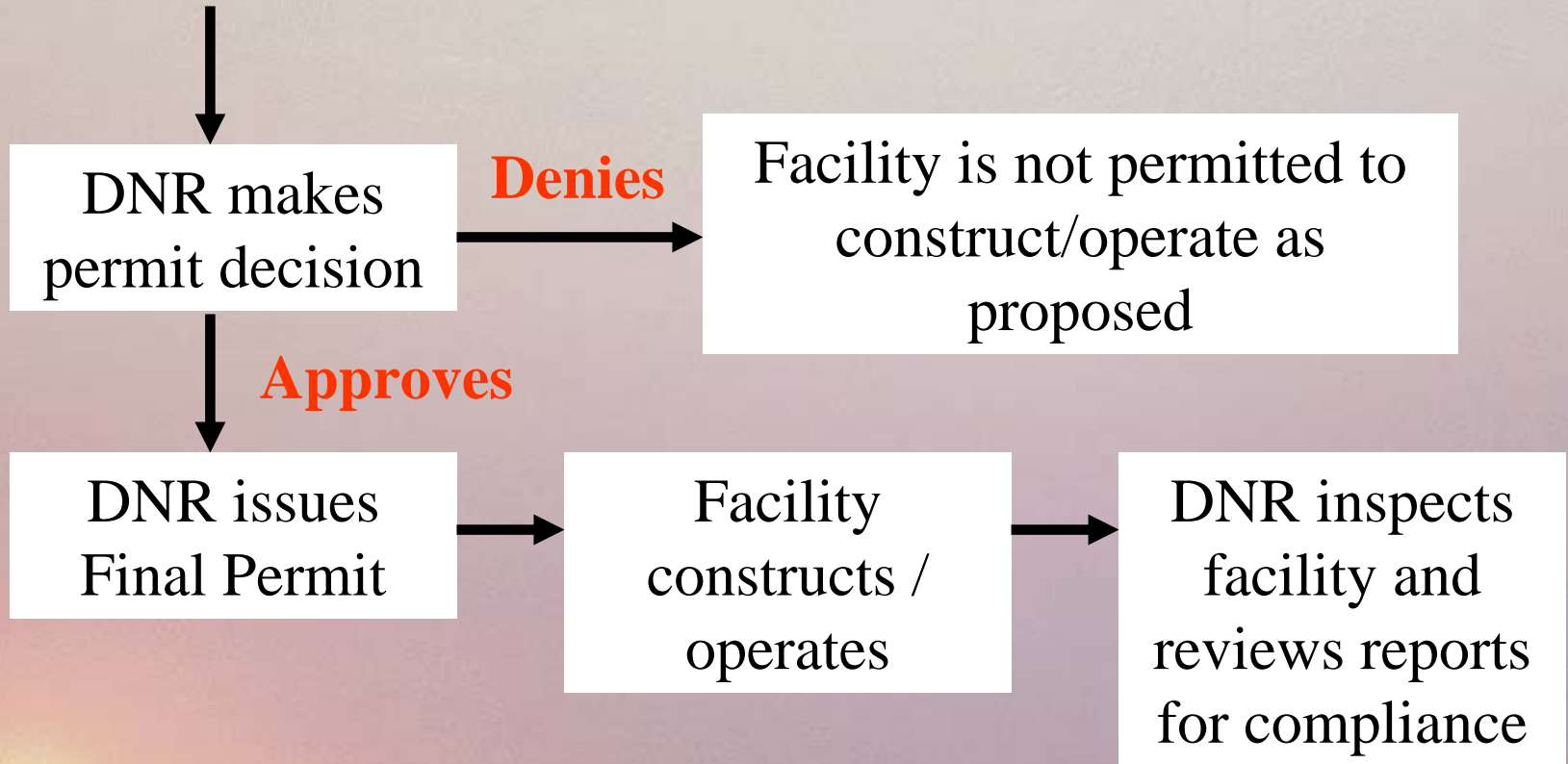




# Permit Processing Procedure



# Permit Processing Procedure



# Air Quality Analysis

- How are possible impacts to air quality estimated?
  - Computer program predicts air quality in the neighborhood surrounding the facility.
  - The predicted air quality is compared to:
    - National Ambient Air Quality Standards (NAAQS)
    - Hazardous Air Pollutant Standards



# **Air Quality Analysis**

- **“Ambient” (Outdoor) Air Quality Standards are set to:**
  - **Protect sensitive individuals**
  - **Protect human health and welfare**



# Air Quality Analysis

- **Ambient Air Quality Standards address:**
  - **Criteria Pollutants**
    - Particulate Matter (PM), PM<sub>10</sub>, Carbon Monoxide, Nitrogen Dioxide, Ozone (volatile organic compounds), Sulfur Oxides, and Lead
  - **Hazardous Air Pollutants (HAP)**
    - Wisconsin regulates over 500 HAP
    - Carcinogens: benzene, formaldehyde, ...
    - Others: toluene, xylene, ...

# Risk Assessment

- **Health Risk**
  - The probability, or chance, that exposure to a hazardous substance will make you sick
- **How is risk estimated?**
  - **Health Risk = Hazard x Exposure**




# Risk Assessment

- **DNR's Review**

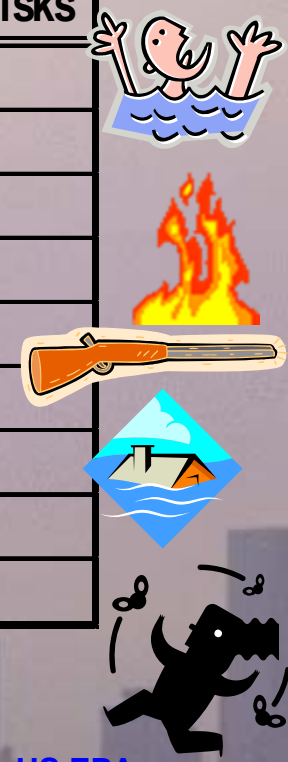
- Mathematical computer models are used on hazardous air pollutants that are considered carcinogens
- Estimate risk to the maximum exposed individual
- Acceptable risk level is 1 in 100,000, or lower over a lifetime of exposure assuming:
  - Person at point of maximum impact, for 70 years breathing the air with the pollutant present

# Risk Assessment <sup>1</sup>

- Common Risks - estimated risks of death for US residents from incidents



Incident	Average Yearly Risks	Average Lifetime Risks
Motor vehicles	~ 1 in 4000	~ 1 in 60
Falls	~ 1 in 16000	~ 1 in 200
Drowning	~ 1 in 28000	~ 1 in 400
Fires	~ 1 in 36000	~ 1 in 600
Firearms	~ 1 in 100000	~ 1 in 1400
Electrocution	~ 1 in 190000	~ 1 in 2500
Floods	~ 1 in 1700000	~ 1 in 24000
Lightning	~ 1 in 2000000	~ 1 in 29000
Animal bite/sting	~ 1 in 4200000	~ 1 in 590000

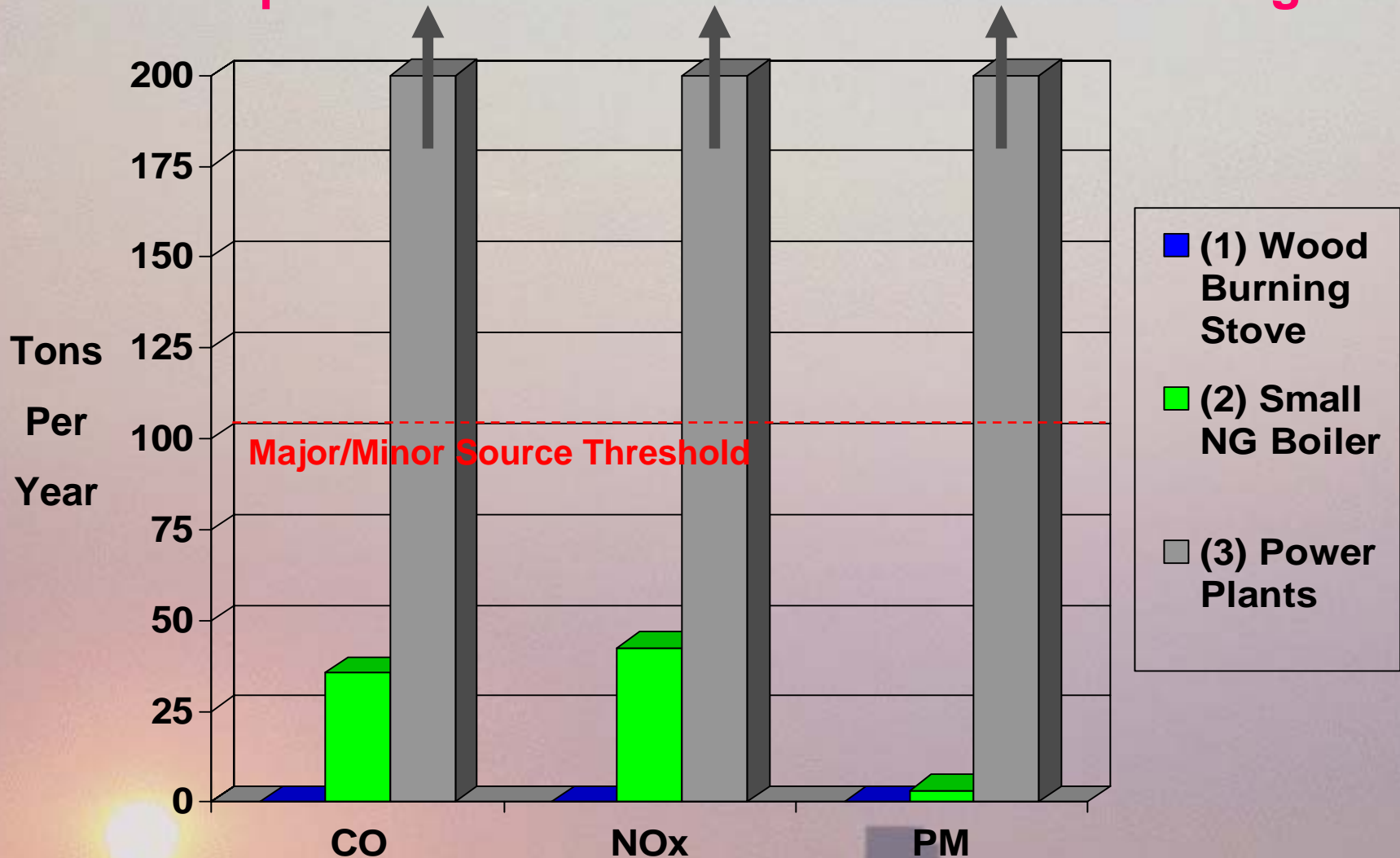


<sup>1</sup> United States Environmental Protection Agency. 1991. "Air Pollution and Health Risk." EPA 450/3-90-022. US EPA - Technology Transfer Network - Air Toxics Website. March 1991.

# Air Pollution - Levels

- Facility Size Categories
  - Minor
  - Synthetic Minor
  - Major
    - Criteria Pollutants
    - Hazardous Air Pollutants
- This permit is for a [INSERT TYPE OF PERMIT]

# Example of Emission Levels from Source Categories



(1) Assumes the wood burning stove burns 1 ton of wood per year, continuously.

\*\* All emissions are below 1 TPY.

(2) Boiler rated at 99 MMBtu/hr input, natural gas fired.

(3) Average PTE from 5 permitted sources in WI.

\*\* Emissions are 4827 TPY CO, 7264 TPY NOx, and 910 TPY PM.

# **Conclusion – This Permit Application**

- **Preliminary Determination Concluded**
  - Source attains and will maintain ambient air quality standards
  - Source will meet applicable emission limits and other requirements
- **Permit**
  - A permit may be issued with associated applicable limits and permit conditions



# Conclusion – This Permit

- **Compliance with Permit once issued**
  - **Facility required to submit:**
    - Annual (or more frequent) compliance monitoring and certification reports
    - Annual (or more frequent) emissions reporting
  - **Stack testing**
  - **Periodic inspections by Department staff**



# Conclusion – Public Comment

- **Public Comment**
  - Comment period duration is 30 days from publication of notice
  - Last day of public comment is [INSERT DATE HERE]
- **This Hearing**
  - Questions/Answers
  - Comments



Thank you for your  
THANK  
YOU  
on